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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,493	08/18/2003	Yoshihiro Katsumata	K-2073	1858

32628 7590 03/14/2006

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EXAMINER
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COONEY, JOHN M

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/642,493

Applicant(s)

KATSUMATA, YOSHIHIRO

Examiner

John m. Cooney

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,13,14,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,13,14,17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 10/227,269.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2-21-06 has been entered.

The following rejection is maintained and modified herein to reflect further considerations:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3,4,13,14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scherzer et al. (6,031,013), alone, or in view of Fujita et al.(6,303,669).

Scherzer et al. discloses preparations of polyurethane foams from high molecular weight polyols, isocyanates as claimed, foaming agents inclusive of water in amounts prescribed by applicants' claims, chain extenders and/or crosslinkers reading on

Art Unit: 1711

applicants' claimed low molecular weight polyol and the crosslinkers of applicants' claims, silicone-polyether stabilizers, and catalysts, wherein the reactants are combined under NCO Indexes as claimed in amounts and manners which meet the urethane/urea criteria of applicants' claims (see column 1 line 47-column 10 line 13, column 12 lines 25-31, as well as, the entire document).

Scherzer et al. differs from applicants' claims in that urea modification to the polymer through inclusion of urea groups is not particularly required. However, the reference is clear in its recitation that urea group content may be incorporated into the polymers through inclusion of urea groups in the isocyanate (see column 2 lines 53-56). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed isocyanates containing urea groups, as disclosed by Scherzer et al. in the making of the preparations of Scherzer et al. for the purpose of imparting greater crystallinity to the structures realized in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Scherzer et al. differs from applicants' claims in that overlap of the molecular weight of the polyol materials is not exact. However, Scherzer et al. discloses operation over the entirety of the ranges claimed by applicants' (see column 3 lines 30-34) as well as specific embodiments meeting at applicants' claimed endpoints (column 5 lines 1-3) for purposes of achieving acceptable reaction parameters and lightfastness. Accordingly, it would have been obvious for one having ordinary skill in the art to have operated within the fully disclosed ranges of molecular weight values disclosed by

Art Unit: 1711

Scherzer et al. in practice of the invention of Scherzer et al. for the purpose of obtaining acceptable display of reaction and lightfastness in articles obtained in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. It has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of similar properties. *Titanium Metals v Banner* 227 USPQ 773. **(see also MPEP 2144.05 I)** Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980)

Scherzer et al. further differs from the claims in that the flexible polyurethanes prepared are not particularly employed as edge members of diaphragms of speakers. However, Fujita et al. discloses that it is well known to employ flexible polyurethane foams as edge members of diaphragms of speakers for the purpose of utilizing the beneficial properties of the respective foam while serving the function of operating as a speaker edge material. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the flexible foam materials of Scherzer et al. in the function of the speaker edge material in the preparations of Fujita et al. for the purpose of imparting their flexibility and lightfastness effect in order to arrive at the

Art Unit: 1711

products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

The following are remarks set forth in the final Office action mailed 8-19-05 in reply to applicants' arguments received 6-13-05.

Applicants' arguments have been considered with regards to the above rejection, but rejection is maintained to be proper for the reasons as set forth above.

Scherzer et al. is maintained to teach allowance for the inclusion of urea group contents in their preparations, and rejection on this issue is maintained to be proper. Applicants have not established criticality associated with and commensurate in scope with the range of relative urea content values recited in the claims.

Scherzer et al. and Fujita et al. are maintained to be properly combined as set forth above, and it is maintained that success would be reasonably expected upon making the combinations as set forth in the rejection above. Applicants' have not demonstrated new or unexpected results associated with the employment of the materials, as defined by the claims, as edge members of the diaphragms of speakers to a sufficient degree that the rejection, as set forth above, is overcome.

These positions are maintained.

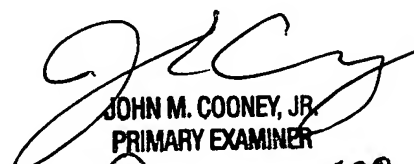
Applicants' latest arguments have been considered. However, rejection is maintained for all of the reasons set forth above. Applicants' ranges of molecular weight values are addressed in the rejection above, and the position of obviousness is held and maintained to be proper as set forth above. Fujita et al. is looked to for the reasons set forth in the rejection above, and is not looked to for its teachings as to particular polyol selections.

Applicants' allegations of unexpected results have been noted. However, they are not supported by factually supported showings of new or unexpected results which are commensurate in scope with the scope of the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER  
Group 1700